<center>**REMARKS**</center>

In an Office Action dated February 23, 2011, claims 1-19 were rejected. Herein, claims 1, 3-8, and 10-19 have been amended. No new matter has been added. Additionally, claim 2 has been cancelled without prejudice or disclaimer to the subject matter therein. Applicants respectfully request further examination and reconsideration in view of the following remarks.

Minor editorial amendments have been made to the specification. No new matter has been added.

I. Claim Rejections under 35 U.S.C. 101

Claim 19 was rejected under 35 U.S.C. 101 as being directed to non-statutory subject matter. In particular, the Examiner notes that claim 19 is directed to a program, and as such, the Examiner has taken the position that claim 19 is directed to software per se. Applicants note that claim 19 has been amended to recite that the program is embodied on a non-transitory computer readable recording medium. Accordingly, it is respectfully requested that the rejection of claim 19 under 35 U.S.C. 101 be withdrawn.

II. Claim Rejections under 35 U.S.C. 102

Claims 1-4 and 7-19 under were rejected 35 U.S.C. 102(a) as being anticipated by Richardson ("H.264 and MPEG-4 Video Compression: Video Coding for Next-generation Multimedia," John Wiley & Sons, Ltd., January 16, 2004, hereafter "Richardson"). Applicants respectfully request reconsideration of the above-noted rejection in view of the following.

Claim 1 recites: a first calculation step of calculating intermediate values, which are bases of sub-pixel values of first sub-pixels, by multiplying, with coefficients, pixel values of pixels included in a reference picture; that the first calculation step includes multiplying, with a corresponding coefficient, pixel values of six pixels included in the reference picture; and that the coefficients used in the first calculation step are set so that none of the intermediate values calculated in the first calculation step exceed a 16-bit accuracy. Applicants respectfully submit that the above-noted features of claim 1 are not disclosed, suggested, or otherwise rendered obvious by Richardson.

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Richardson discloses the MPEG-4/H.264 standard for video encoding/decoding. Richardson teaches that a half-pel sample between adjacent integer-position samples may be generated by interpolating the adjacent integer-position samples using a six-tap weighted Finite Impulse Response filter (page 173). In particular, Richardson teaches multiplying six adjacent inter-position samples with an appropriate weight to generate immediate values and rounding a sum of the immediate values to produce a half-pel value (*See* the equation for **b** on page 173). However, Richardson <u>fails</u> to teach choosing the weights for the six-tap FIT filter so that none of the intermediate values exceed 16-bit accuracy.

In contrast to Richardson, claim 1 requires a first calculation step of calculating intermediate values, which are bases of sub-pixel values of first sub-pixels, by multiplying, with coefficients, pixel values of pixels included in a reference picture; that the first calculation step includes multiplying, with a corresponding coefficient, pixel values of six pixels included in the reference picture; and <u>that the coefficients used in the first calculation step are set so that none of the intermediate values calculated in the first calculation step exceed a 16-bit accuracy</u>.

In view of the above, Applicants respectfully submit that the above-noted features of claim 1 are not disclosed, suggested, or otherwise rendered obvious by Richardson. Therefore, claim 1 is patentable over Richardson.

Applicants note that by providing the above-noted feature of claim 1, the presently claimed invention provides the advantageous effect of reducing the operation load and simplifying the configuration of a motion compensation apparatus.

Claims 3, 4, and 7-11 are patentable over Richardson based at least on their dependency from claim 1.

Claim 12-14 and 19 recite: a calculation step of calculating intermediate values, which are bases of sub-pixel values of first sub-pixels, by multiplying, with coefficients, pixel values of pixels included in a reference picture; that the calculation step includes multiplying, with a

corresponding coefficient, pixel values of six pixels included in the reference picture; and that the coefficients used in the calculation step are set so that none of the intermediate values calculated in the calculation step exceed a 16-bit accuracy. Applicants respectfully submit that the above-noted features of claims 12-14 and 19 are not disclosed, suggested, or otherwise rendered obvious by Richardson for reasons similar to those discussed above with respect to claim 1. Therefore, claims 12-14 and 19 are patentable over Richardson.

Claim 15-18 recite: a calculation unit operable to calculate intermediate values, which are bases of sub-pixel values of first sub-pixel, by multiplying, with coefficients, pixel values of pixels included in a reference picture; that the calculation unit is further operable to multiply, with a corresponding coefficient, pixel values of six pixels included in the reference picture; and that the coefficients used by the calculation unit are set so that none of the intermediate values calculated by the calculation unit exceed a 16-bit accuracy. Applicants respectfully submit that the above-noted features of claims 15-18 are not disclosed, suggested, or otherwise rendered obvious by Richardson for reasons similar to those discussed above with respect to claim 1. Therefore, claims 15-18 are patentable over Richardson.

III. Claim Rejections under 35 U.S.C. 103

Claim 5 was rejected under 35 U.S.C. 103(a) as being unpatentable over Richardson in view of Sekiguchi et al. (US 2008/0084930, hereafter "Sekiguchi"). Applicants respectfully submit that Sekiguchi fails to provide disclosure that would obviate the above-mentioned deficiencies of Richardson. Accordingly, claim 5 is patentable over any combination of Richardson and Sekiguchi based at least on its dependency from claim 1.

Claim 6 was rejected under 35 U.S.C. 103(a) as being unpatentable over Richardson in view of Sekiguchi, and further in view of Etoh et al. (US 2005/0063466, hereafter "Etoh"). Applicants respectfully submit that Sekiguchi and Etoh fail to provide disclosure that would obviate the above-mentioned deficiencies of Richardson. Accordingly, claim 6 is patentable over any combination of Richardson, Sekiguchi, and Etoh based at least on its dependency from claim 1.

IV.   Conclusion

In view of the foregoing amendments and remarks, Applicants respectfully submit that claims 1 and 3-19 are clearly in condition for allowance. An early notice thereof is earnestly solicited.

If, after reviewing this Amendment, the Examiner believes that there are any issues remaining which must be resolved before the application can be passed to issue, it is respectfully requested that the Examiner contact the undersigned by telephone in order to resolve such issues.

Respectfully submitted,

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